

CIVIL ENGINEER I

GRADE: 20

FLSA: EXEMPT

CHARACTERISTICS OF CLASS:

The Civil Engineer I performs difficult professional and related administrative work in the investigation, design and construction of municipal projects and facilities. Work involves responsibility for the application of professional engineering skills to a wide variety of public works planning and design projects. The employee manages individual design projects and may direct and supervise the work of other engineering personnel in project execution. The Civil Engineer's work is both proactive and reactive with contacts on matters requiring cooperation and explanation. Physical demands are light and the work involves mental effort and stress in handling multiple projects and meeting deadlines. Work is directed and subject to general supervisory review, with serious consequences. The employee is assigned to the Engineering Division with work usually assigned and monitored by the Senior Engineering staff.

EXPECTATIONS OF ALL CITY EMPLOYEES:

- Learn and demonstrate an understanding of City, department, division and team goals.
- Serve and meet the needs of customers during routine or emergency situations.
- Ability and willingness to work as part of a team, to demonstrate team skills and to perform a fair share of team responsibilities.
- Ability to assess his/her work performance or the work performance of the team.
- Plan and organize his/her work, time and resources, and if applicable that of subordinates.
- Contribute to the development of others and/or the working unit or overall organization.
- Produce desired work outcomes including quality, quantity and timeliness.
- Communicate effectively with peers, supervisors, subordinates and people to whom service is provided.
- Understand and value differences in employees and value input from others.
- Consistently report to work and work assignments prepared and on schedule.
- Consistently display a positive behavior with regard to work, willingly accept constructive criticism and be respectful of others.

EXAMPLES OF DUTIES:

- Prepares construction plans, plats, descriptions, specifications and estimates for a variety of water, sanitary sewer, storm drainage, storm water management, sediment control, roadway, sidewalk and other construction, repair or modification projects.

- Reviews standards, specifications, ordinance requirements and regulations applied by the City and researches latest developments in order to recommend modifications and advise on their probable impact.
- Reviews proposed public works projects, and discusses their needs, feasibility and impact on development with the Senior Engineering staff. Develops cost estimates as part of a long-range Capital Improvements Program.
- Reviews plans, specifications, invoices and contract documents prepared by consulting engineers for propriety, adequacy and accuracy; coordinates City projects with utility companies.
- Estimates costs of new construction projects, formulates special provisions, and assists in preparation of bid proposals; coordinates needed property acquisitions with appropriate parties.
- Assists and advises inspection personnel in order to alleviate problems and resolve contract administration difficulties.
- Answers public inquiries regarding projects and other engineering matters; attends public hearings, community and citizen meetings to describe new engineering projects and advise on engineering related matters.
- Assists in preparation of the Engineering Division operating and Capital Improvements Plan budgets, and in the evaluation of construction and use permit requests, and in other administrative and related matters.
- Recommends permit conditions and requirements.
- Resolves complaints pertaining to storm drainage and storm water management issues.
- Manages individual engineering projects and provides estimates for budgetary and design purposes.
- Performs other duties as required.

QUALIFICATIONS:

Required Training and Experience:

Any combination of training and experience substantially equivalent to graduation from an accredited four year college or university with major course work in civil engineering. Responsible experience in the engineering of public works environmental projects is preferred. Possession of certification from the Board of Registration for Professional Engineers for the State of Maryland is preferred. Possession of an appropriate driver's license valid in the State of Maryland.

Preferred Knowledge, Skills and Abilities:

- Considerable knowledge of the principles and practices of civil engineering.
- Considerable knowledge of the appropriate standard and procedures used in the design and construction of roadway, water, sanitary sewer, storm drainage, storm water management, sediment control and other public works construction.
- Considerable knowledge of construction methods, materials and equipment used in public works construction.

- Good knowledge of information sources, research techniques and reporting standards used in public works engineering.
- Skill in the use of drafting instruments: skill in making engineering computations, estimates and designs.
- Skill in the use of word processing and data processing equipment.
- Ability to make difficult engineering computations and to design a variety of standard and complex public works projects quickly and accurately.
- Ability to review engineering plans, specifications and documents and to discern and correct errors in design and criteria.
- Ability to establish and maintain effective working relationships with other engineers and employees, contractors and other persons contacted in the course of the work.
- Ability to plan and assign work for contract engineers, inspectors and surveyors.